

Amendments to the Claims:

1-0 / 537 272
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The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-19 (cancelled).

20. (new) A pneumatic disc brake for use with a brake disc, comprising:
a caliper which, in use, straddles the brake disc;

at least one brake application device for applying the brake, the brake application device being arranged in the caliper on one side of the brake disc when in use;

at least one wear adjusting device for compensating brake pad wear, the at least one wear adjusting device having at least one electromotive drive and being operatively configured to function as a parking and/or emergency brake;

wherein the electromotive drive includes an electric motor and is operatively dimensioned to drive the wear adjusting device to function as the parking and/or emergency brake.

21. (new) The disc brake according to claim 20, wherein the wear adjusting device includes additional mechanical components appropriately dimensioned for use as the parking and/or emergency brake.

22. (new) The disc brake according to claim 20, wherein the electromotive drive includes electrical/electronic components operatively designed for the wear adjusting device to function as the parking and/or emergency brake.

23. (new) The disc brake according to claim 20, wherein at least one wear adjusting device is arranged on each side of the brake disc.

24. (new) The disc brake according to claim 23, wherein at least two wear adjusting devices are arranged on each side of the brake disc.

25. (new) The disc brake according to claim 23, wherein only a wear adjusting device on one side of the brake disc is operatively configured to function as the parking and/or emergency brake.

26. (new) The disc brake according to claim 20, wherein the at least one electromotively driven wear adjusting device is arranged on an actuation side of the disc brake for implementing the parking and/or emergency brake function.

27. (new) The disc brake according to claim 20, wherein the electric motor is accommodated in, on, or under the caliper; and

wherein the electric motor engages a transmission gearing of the wear adjusting device via a coupling gear.

28. (new) The disc brake according to claim 20, further comprising:

a control unit having a control program, said control program having program code segments that implement the parking and/or emergency brake function by way of the wear adjusting device.

29. (new) A method of controlling a pneumatically actuated disc brake, the method comprising the acts of:

signaling the use of a parking and/or emergency brake function for the disc brake; and

using an electromotive wear adjusting device of the disc brake to implement the parking and/or emergency brake function.

30. (new) The method according to claim 29, wherein when the parking brake function is implemented, a pressure in a service brake cylinder for the disc brake is at least temporarily reduced.

31. (new) The method according to claim 30, wherein for performing the signaling act, the method further comprises the acts of:

obtaining information from gradient sensors and/or other information present in an electronic braking system of the vehicle; and

determining a pressure of service brake cylinders required for temporarily stopping the vehicle.

32. (new) The method according to claim 31, wherein the information includes changes of an output signal of axle load sensors when driving on gradients and/or stored data of a preceding stopping operation on a gradient.

33. (new) The method according to claim 32, wherein the stored data includes one of brake pressure and achieved deceleration of the vehicle.

34. (new) The method according to claim 29, wherein for reducing a power demand of the electromotive adjusting device to implement the parking and/or emergency brake function, a brake cylinder pressure is reduced only at individual wheels, and further wherein after engaging the parking brake at said wheels, the brake cylinder pressure is raised again such that the parking brake is engaged successively at different axles or wheels of the vehicle.

35. (new) The method according to claim 29, wherein for controlling the parking and/or emergency brake function, an electric desired-value signal is generated via one of an operating element operable by a driver, and an electronic control unit via gradient and/or force sensor signals; and

wherein the electric desired-value signal is converted in a brake-integrated control to an adjusting path of adjusting screws of the wear adjusting

device, said adjusting path being dimensioned such that a defined spreading-open of the caliper is adjusted corresponding to a tension force of the caliper necessary to achieve the defined desired-value.

36. (new) The method according to claim 29, wherein a desired-value definition is obtained from a signal of a pressure sensor for controlling the parking and/or emergency brake function in the case of vehicles equipped only on one axle with an integrated electromotive parking and/or emergency brake and with conventional spring brakes on a driving axle, which pressure sensor detects the pressure acting upon the spring brakes.

37. (new) The method according to claim 29, wherein, in the case of a disc brake with a wear adjustment device on both sides of the brake disc, the parking and/or emergency brake function is generated only on one side of the brake.

38. (new) The method according to claim 29, wherein, in the case of a disc brake with a wear adjustment device on both sides of the disc, a second adjusting device not required when engaging the parking and/or emergency brake is controlled for reducing a release play and for reducing an application stroke of the first wear adjusting device.

39. (new) A parking brake for a vehicle equipped with a pneumatic disc service brake, comprising:

at least one electromotively driven brake pad wear adjusting device of the pneumatic disc service brake;

an electromotive drive including an electric motor for the brake pad wear adjusting device; and

wherein the electromotive drive is operatively dimensioned to control the service brake as the parking brake.